

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

10 Jun 2026

### Effects of Active Release Technique and Active Isolated Stretching on the muscles of upper cross syndrome

#### Protocol summary

##### Study aim

To determine the effects of Active Release Technique and Active Isolated Stretching on the muscles of upper cross syndrome

##### Design

two groups, single blinded randomized controlled trial

##### Settings and conduct

SETTING The study will be conducted in Max rehab and other physiotherapy clinic

##### Participants/Inclusion and exclusion criteria

Inclusion Criteria • Patients from both genders • patients of age 20 to 40 . • patients with a score of 4 or more on numerical pain rating scale (NPRS). • Cranio-vertebral angle measured less than or equal to 50 degree.

Exclusion Criteria Patients were excluded if they exhibited; • any inflammatory arthritis including Rheumatoid arthritis, Ankylosing spondylitis, • cervical spine surgery, • cervical spine trauma, • cervical spine instability

##### Intervention groups

Group A: active release technique Group B: active Isolated Stretching

##### Main outcome variables

Muscle length measurement, Forward head posture, Function, Range of Motion

#### General information

##### Reason for update

##### Acronym

UCS, AIS, ART

##### IRCT registration information

IRCT registration number: **IRCT20200703047993N1**

Registration date: **2020-09-28, 1399/07/07**

Registration timing: **prospective**

Last update: **2020-09-28, 1399/07/07**

Update count: **0**

##### Registration date

2020-09-28, 1399/07/07

##### Registrant information

###### Name

Fizza Ali Syed

###### Name of organization / entity

Riphah International University

###### Country

Pakistan

###### Phone

+92 42 36297030

###### Email address

fizza.ali.syed@gmail.com

##### Recruitment status

**Not yet recruiting**

##### Funding source

##### Expected recruitment start date

2641-06-21, 2020/03/31

##### Expected recruitment end date

2641-12-20, 2020/09/29

##### Actual recruitment start date

empty

##### Actual recruitment end date

empty

##### Trial completion date

empty

##### Scientific title

Effects of Active Release Technique and Active Isolated Stretching on the muscles of upper cross syndrome

##### Public title

Effects of Active Release Technique and Active Isolated Stretching on the muscles of upper cross syndrome

##### Purpose

Treatment

##### Inclusion/Exclusion criteria

###### Inclusion criteria:

• Patients from both genders • patients of age 20 to 40

years • patients with a score of 4 or more on numerical pain rating scale (NPRS). • Cranio-vertebral angle measured less than or equal to 50 degree.

**Exclusion criteria:**

- any inflammatory arthritis including Rheumatoid arthritis, Ankylosing spondylitis, , • cervical spine surgery, , • cervical spine trauma, , • cervical spine instability

**Age**

From **20 years** old to **40 years** old

**Gender**

Both

**Phase**

N/A

**Groups that have been masked**

- Outcome assessor

**Sample size**

Target sample size: **34**

**Randomization (investigator's opinion)**

Randomized

**Randomization description**

, Once the above mentioned inclusion and exclusion criteria will be taken into account, potential participants will be considered. They will be requested to participate in the study. Written informed consent will be taken from Riphah ethical committee. Each participant will be requested to draw either number one or number two from a box. Number one will be allocated to Group A and number two will be allocated to group B.

**Blinding (investigator's opinion)**

Single blinded

**Blinding description**

Outcome Assessor will be blinded by labeling the participants with different codes.

**Placebo**

Not used

**Assignment**

Parallel

**Other design features**

**Secondary Ids**

empty

**Ethics committees**

**1**

**Ethics committee**

**Name of ethics committee**

Secretary ethical review committee, Riphah College of Rehabilitation and Allied health Sciences

**Street address**

28-M, Quaid-e-Azam Industrial Estate, Kot Lakhpat, Lahore.

**City**

Lahore

**Postal code**

54000

**Approval date**

2641-04-27, 2020/02/07

**Ethics committee reference number**

1046

**Health conditions studied**

**1**

**Description of health condition studied**

upper cross syndrome

**ICD-10 code**

M62.9

**ICD-10 code description**

Disorder of muscle, unspecified

**Primary outcomes**

**1**

**Description**

- Muscle length measurement

**Timepoint**

baseline, before and after treatment session, 3 sessions per week on alternate days for a period of 16 sessions.

**Method of measurement**

Vernier calipers and measuring tape

**2**

**Description**

- Cervical ROM

**Timepoint**

baseline, before and after treatment session, 3 sessions per week on alternate days for a period of 16 sessions.

**Method of measurement**

Universal Goniometer.

**Secondary outcomes**

**1**

**Description**

function

**Timepoint**

baseline, before and after treatment session, 3 sessions per week on alternate days for a period of 16 sessions.

**Method of measurement**

Neck disability index

**2**

**Description**

Forward head posture

**Timepoint**

baseline, before and after treatment session, 3 sessions per week on alternate days for a period of 16 sessions.

**Method of measurement**

- APECS app

**Intervention groups**

## 1

### Description

Intervention group :Group A: active release technique. The patients will complete the questionnaire given to them. The researchers screened the participants for tight musculature by testing. To treat muscle with ART, the therapist puts patient in a position so that the muscle is shortened and then applies hands-on tension. Next, they'll instruct the patient to lengthen while they hold the tension in place. They may apply this combination of tension and motion to several different areas before patient feel the full release. Treatment of active release technique given to subjects in Group A performed by researcher at weekly intervals. subjects received active release technique, 3 sets of 10 repetitions per session 3 sessions per week on alternate days for a period of 16 sessions. Session lasts for 40 minutes, three times a week for 6 weeks. The pre and post visit will involve: The researcher will reassess the patient, After the complete session patients will fill the questionnaire again. The researcher will measure the muscle length and compare with the pre-liminary measurement taken.

### Category

Treatment - Other

## 2

### Description

Intervention group: Group B: active Isolated Stretching. The patients will complete the questionnaire given to them. The researchers screened the participants for tight musculature by testing. • Treatment of active isolated stretching exercise given to Group B. Perform five to 10 repetitions. The process of holding the stretch for 1-2 seconds is repeated 8-10 times for optimal "melting of the fascia". This intervention is applied for 3 times a week for 5 weeks or 16 sessions. Session lasts for 40 minutes, three times a week for 6 weeks. The pre and post visit will involve: The researcher will reassess the patient, After the complete session patients will fill the questionnaire again ,The researcher will measure the muscle length and compare with the pre-liminary measurement taken.

### Category

Treatment - Other

## Recruitment centers

## 1

### Recruitment center

#### Name of recruitment center

Max Rehab

#### Full name of responsible person

Fizza Ali Syed

#### Street address

28-M, Quaid-e-Azam Industrial Estate, Kot Lakhpat, Lahore.

#### City

Lahore

#### Postal code

54000

#### Phone

#### Fax

#### Email

fizza.ali.syed@gmail.com

#### Web page address

## Sponsors / Funding sources

## 1

### Sponsor

#### Name of organization / entity

Riphah International University

#### Full name of responsible person

Rabiya Noor

#### Street address

28-M, Quaid-e-Azam Industrial Estate, Kot Lakhpat, Lahore.

#### City

Lahore

#### Postal code

54000

#### Phone

+92 42 35126110

#### Email

rabiya.noor@yahoo.com

#### Web page address

#### Grant name

Educational

#### Grant code / Reference number

1046

#### Is the source of funding the same sponsor organization/entity?

Yes

#### Title of funding source

Riphah International University

#### Proportion provided by this source

15

#### Public or private sector

Public

#### Domestic or foreign origin

Domestic

#### Category of foreign source of funding

empty

#### Country of origin

#### Type of organization providing the funding

Academic

## Person responsible for general inquiries

### Contact

#### Name of organization / entity

Riphah international university Lahore

#### Full name of responsible person

Fizza Ali Syed

#### Position

student

#### Latest degree

Bachelor

#### Other areas of specialty/work

Physiotherapy

#### Street address

House No 4 street No 36 Qilla gujjar singh Lahore

**City**

Lahore

**Province**

Punjab

**Postal code**

54000

**Phone**

+92 42 36297030

**Email**

fizza.ali.syed@gmail.com

**Person responsible for scientific inquiries**

**Contact**

**Name of organization / entity**

Riphah International University Lahore

**Full name of responsible person**

Fizza Ali Syed

**Position**

student

**Latest degree**

Bachelor

**Other areas of specialty/work**

Physiotherapy

**Street address**

House No 4 street No 36 Qilla gujjar singh , Lahore

**City**

Lahore

**Province**

Punjab

**Postal code**

54000

**Phone**

+92 42 36297030

**Email**

fizza.ali.syed@gmail.com

**Person responsible for updating data**

**Contact**

**Name of organization / entity**

Riphah International University Lahore

**Full name of responsible person**

Fizza Ali Syed

**Position**

student

**Latest degree**

Bachelor

**Other areas of specialty/work**

Physiotherapy

**Street address**

House No 4, street No 36, Qilla Gujjar Singh ,Lahore

**City**

Lahore

**Province**

Punjab

**Postal code**

54000

**Phone**

+92 42 36297030

**Fax**

**Email**

fizza.ali.syed@gmail.com

**Web page address**

**Sharing plan**

**Deidentified Individual Participant Data Set (IPD)**

Undecided - It is not yet known if there will be a plan to make this available

**Study Protocol**

Undecided - It is not yet known if there will be a plan to make this available

**Statistical Analysis Plan**

Undecided - It is not yet known if there will be a plan to make this available

**Informed Consent Form**

Undecided - It is not yet known if there will be a plan to make this available

**Clinical Study Report**

Undecided - It is not yet known if there will be a plan to make this available

**Analytic Code**

Undecided - It is not yet known if there will be a plan to make this available

**Data Dictionary**

Undecided - It is not yet known if there will be a plan to make this available